WHAT IS CLAIMED IS:

1. A fluid heating apparatus comprising:

a pump for circulating fluid through a fluid passage;

a heating device for heating the fluid;

a first temperature detecting means for detecting a temperature that changes in accordance with heat generation of the heating device; and

a second temperature detecting means for detecting a temperature of the fluid,

wherein the second temperature detecting means is disposed downstream from the heating device,

wherein when it is determined that a temperature difference between detected temperatures detected by the first temperature detecting means and the second temperature detecting means exceeds a predetermined level, heating operation of the heating device is stopped.

2. The fluid heating apparatus according to claim 1, wherein the first temperature detecting means detects a temperature of a pipe forming the fluid passage.

3. The fluid heating apparatus according to claim 1, wherein the first temperature detecting means detects a temperature proximate to a pipe forming the fluid passage.

4. The fluid heating apparatus according to claim 1, wherein the heating device heats a portion of a pipe, which forms the fluid

passage, wherein the first temperature detecting means detects a temperature at a position proximate to a downstream portion of the heated portion of the pipe.

5. The fluid heating apparatus according to claim 1, wherein the first temperature detecting means is disposed at a position proximate to an upper half of the heating device.

6. The fluid heating apparatus according to claim 1, wherein a portion of the fluid passage that is heated by the heating device includes a curved portion, wherein the first temperature detecting means is disposed proximate to the curved portion.

7. The fluid heating apparatus according to claim 6, wherein the first temperature detecting means is disposed proximate to an apex of the curved portion.

8. A heating apparatus for heating air comprising:

a pump for circulating fluid;

a heating device for heating the fluid;

a heat exchanger for performing heat exchange between the air and the fluid heated by the heating device;

a first sensor for detecting a temperature that changes in accordance with heat generation of the heating device; and

a second sensor for detecting a temperature of the fluid at a position proximate to a fluid inlet of the heat exchanger,

wherein when a temperature difference between detected

temperatures detected by the first sensor and the second sensor is greater than a predetermined level, heating operation of the heating device is stopped.

9. The heating apparatus according to claim 8, further comprising:

a target temperature determining means for determining a target temperature of the fluid flowing into the heat exchanger; and

a controlling means for controlling operation of the heating device such that the detected temperature of the second sensor reaches the target temperature.

10. The heating apparatus according to claim 8, wherein the heating device heats a portion of the fluid passage, wherein the first sensor detects a temperature proximate to a downstream portion of the heated portion of the fluid passage.

11. The heating apparatus according to claim 8, wherein a portion of the fluid passage heated by the heating device has a curved portion and the first sensor detects a temperature proximate to an apex of the curved portion.